

# Statement of Basis of the Federal Operating Permit

Styrolution America LLC

Site/Area Name: Texas City Chemical Plant

Physical location: 2800 FM 519 E

Nearest City: Texas City

County: Galveston

Permit Number: O2849

Project Type: Minor Revision

Standard Industrial Classification (SIC) Code: 2869

SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the minor revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a minor permit revision per §§ 122.215-217. This document may include the following information:

- A description of the facility/area process description;
- A description of the revision project;
- A basis for applying permit shields;
- A list of the federal regulatory applicability determinations;
- A table listing the determination of applicable requirements;
- A list of the New Source Review Requirements;
- The rationale for periodic monitoring methods selected;
- The rationale for compliance assurance methods selected;
- A compliance status; and
- A list of available unit attribute forms.

Prepared on: July 3, 2014

## Operating Permit Basis of Determination

### Description of Revisions

Styrolution America LLC submitted an application for a minor revision to revise 2 engine units subject to MACT ZZZZ regulations, revise 2 boiler units subject to MACT DDDDD regulations, add 1 unit subject to NSPS NNN and MACT G regulations, and add 1 unit subject to 30 TAC 115, Loading/Unloading of VOC's regulations. Preconstruction authorizations for various units are also revised.

### Permit Area Process Description

Benzene and ethylene are the primary feedstock for producing styrene monomer, known simply as 'styrene'. Styrene is an intermediate chemical used to manufacture a variety of polymers and co-polymers such as polystyrene, expandable polystyrene (EPS), and others.

The Styrene Unit (STY) is designed to produce styrene monomer. The styrene process consists of two steps: First, ethylbenzene is produced by the alkylation reaction of ethylene and benzene. Ethylbenzene is separated from the byproducts by distillation. The second step is dehydrogenation of the ethylbenzene, intermediate to styrene over a catalyst. Styrene monomer is then separated from the dehydrogenation by products by vacuum distillation. Polymerization inhibitors are used to retard polymerization of the styrene monomer. As another measure to retard polymerization, the styrene is chilled for storage.

The Propylene Concentration Unit (PCU) produces polymer and chemical grade propylene from a propane propylene (P-P) feed stream. Water is removed from the feed before it enters the fractionation section where distillation occurs in two steps. In the first step, product is taken to the bottom, thus eliminating the lighter compounds. In the second step, product is taken overhead, thereby excluding the heavier component by products.

### FOPs at Site

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

### Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, NOX, HAPS, CO
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### Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
  - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
  - Additional Monitoring Requirements
  - New Source Review Authorization Requirements
  - Compliance Requirements
  - Protection of Stratosphere Ozone
  - Permit Location
  - Permit Shield (30 TAC § 122.148)
- Attachments
  - Applicable Requirements Summary
    - Unit Summary
    - Applicable Requirements Summary
  - Additional Monitoring Requirements
  - Permit Shield
  - New Source Review Authorization References
  - Compliance Plan
  - Alternative Requirements
- Appendix A
  - Acronym list

## General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

## Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

## Attachments

**Applicable Requirements Summary.** The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

**Additional Monitoring Requirement.** The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

**Permit Shield.** A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

**New Source Review Authorization References.** All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

**Compliance Plan.** A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

**Alternative Requirements.** This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

## Appendix A

**Acronym list.** This attachment lists the common acronyms used when discussing the FOPs.

## **Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions**

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

### **Federal Regulatory Applicability Determinations**

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

<b>Regulatory Program</b>	<b>Applicability (Yes/No)</b>
Prevention of Significant Deterioration (PSD)	Yes
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes

40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CAIR (Clean Air Interstate Rule)	No

## Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

## Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.

14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

## **Determination of Applicable Requirements**

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at [www.tceq.texas.gov/permitting/air/nav/air\\_all\\_ua\\_forms.html](http://www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html).

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at [www.tceq.texas.gov/permitting/air/nav/air\\_supportsys.html](http://www.tceq.texas.gov/permitting/air/nav/air_supportsys.html). The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column “Changes and Exceptions to RRT.” If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word “None” will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled “Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected.”

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled “Basis for Applying Permit Shields” specifies which units, if any, have a permit shield.

#### Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.



## Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination *
GRP-EMERGEN	30 TAC Chapter 117, Subchapter B	R117-1	<p>Fuel Flow Monitoring = Unit is a diesel engine operating with a run time meter and using monthly fuel use records maintained for each engine per 30 TAC §§ 117.140(a)(2)(C), 117.340(a)(2)(C) or 117.440(a)(2)(C).</p> <p>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(9)</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 3 g/hp-hr option</p> <p>CO Averaging Method = Complying with the applicable emission limit using a 30-day rolling average.</p> <p>CO Monitoring System = Emissions monitored by means other than a CEMS or PEMS.</p> <p>EGF System Cap Unit = Engine is not used as an electric generating facility to generate electricity for sale to the electric grid.</p> <p>Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)]</p> <p>Fuel Fired = Petroleum-based diesel fuel</p> <p>NOx Averaging Method = Complying with the applicable emission limit using a 30-day rolling average.</p> <p>NOx Reduction = None</p> <p>NOx Monitoring System = Maximum emission rate testing in accordance with 30 TAC § 117.8000</p>
GRP-EMERGEN	40 CFR Part 60, Subpart IIII	60IIII	<p>Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before July 11, 2005.</p>
GRP-EMERGEN	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	<p>Brake HP = Stationary RICE with a brake hp greater than or equal to 100 and less than 250 hp.</p> <p>Manufacture Date = The stationary RICE was manufactured prior to January 1, 2008.</p> <p>Construction/Reconstruction Date = Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006.</p> <p>Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies.</p> <p>Nonindustrial Emergency Engine = Stationary RICE is not defined as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.</p> <p>Service Type = Emergency use.</p> <p>Installation Date = The emergency use stationary RICE was installed prior to June 12, 2006.</p> <p>Stationary RICE Type = Compression ignition engine</p>
STY-MF112	30 TAC Chapter 115, Storage of VOCs	R115B-2	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using an internal floating roof (IFR)</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
STY-MF112	40 CFR Part 60, Subpart K	60K-1	<p>Construction/Modification Date = On or before June 11, 1973</p>
STY-MF112	40 CFR Part 63, Subpart G	63G-1	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
STY-MF1136	30 TAC Chapter 115, Storage of VOCs	R115-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
STY-MF1136	40 CFR Part 60, Subpart Ka	60Ka-1	Product Stored = Stored product other than a petroleum liquid
STY-MF121	30 TAC Chapter 115, Storage of VOCs	R115B-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
STY-MF121	40 CFR Part 60, Subpart K	60K-1	Construction/Modification Date = On or before June 11, 1973
STY-MF121	40 CFR Part 63, Subpart G	63G-1	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>
STY-MF302	30 TAC Chapter 115, Storage of VOCs	R115B-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using an internal floating roof (IFR)</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
STY-MF302	40 CFR Part 60, Subpart K	60K-1	Construction/Modification Date = On or before June 11, 1973
STY-MF302	40 CFR Part 63, Subpart G	63G-2	<p>MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).</p> <p>Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)</p> <p>NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.</p> <p>Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>Emission Control Type = Internal floating roof</p>

Unit ID	Regulation	Index Number	Basis of Determination*
STY-MF303	30 TAC Chapter 115, Storage of VOCs	R115B-3	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
STY-MF303	40 CFR Part 60, Subpart K	60K-1	Construction/Modification Date = On or before June 11, 1973
STY-MF303	40 CFR Part 63, Subpart G	63G-1	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>
STY-MF304	30 TAC Chapter 115, Storage of VOCs	R115B-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using an internal floating roof (IFR)</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
STY-MF304	40 CFR Part 60, Subpart K	60K-1	Construction/Modification Date = On or before June 11, 1973
STY-MF304	40 CFR Part 63, Subpart G	63G-2	<p>MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).</p> <p>Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)</p> <p>NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.</p> <p>Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>Emission Control Type = Internal floating roof</p>
STY-MF305	30 TAC Chapter 115, Storage of VOCs	R115B-2	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
STY-MF305	40 CFR Part 60, Subpart K	60K-1	Construction/Modification Date = On or before June 11, 1973
STY-MF305	40 CFR Part 63,	63G-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel.

Unit ID	Regulation	Index Number	Basis of Determination*
	Subpart G		NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
STY-MF318A	30 TAC Chapter 115, Storage of VOCs	R115B-1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
STY-MF318A	40 CFR Part 60, Subpart K	60K-1	Construction/Modification Date = On or before June 11, 1973
STY-MF318A	40 CFR Part 63, Subpart G	63G-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
STY-MF318B	30 TAC Chapter 115, Storage of VOCs	R115B-1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
STY-MF318B	40 CFR Part 60, Subpart K	60K-1	Construction/Modification Date = On or before June 11, 1973
STY-MF318B	40 CFR Part 63, Subpart G	63G-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
STY-MF319	30 TAC Chapter 115, Storage of VOCs	R115B-1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using an internal floating roof (IFR) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
STY-MF319	40 CFR Part 60, Subpart K	60K-1	Construction/Modification Date = On or before June 11, 1973
STY-MF319	40 CFR Part 63, Subpart G	63G-2	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)</p> <p>NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.</p> <p>Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>Emission Control Type = Internal floating roof</p>
STY-MF320	30 TAC Chapter 115, Storage of VOCs	R115B-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using an internal floating roof (IFR)</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
STY-MF320	40 CFR Part 60, Subpart K	60K-1	Construction/Modification Date = On or before June 11, 1973
STY-MF320	40 CFR Part 63, Subpart G	63G-2	<p>MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).</p> <p>Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)</p> <p>NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.</p> <p>Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>Emission Control Type = Internal floating roof</p>
STY-MF321	30 TAC Chapter 115, Storage of VOCs	R115B-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
STY-MF321	40 CFR Part 60, Subpart K	60K-1	Construction/Modification Date = On or before June 11, 1973
STY-MF321	40 CFR Part 63, Subpart G	63G-1	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>
STY-MS101	40 CFR Part 60, Subpart K	60K-1	Construction/Modification Date = On or before June 11, 1973
STY-MS1132	30 TAC Chapter 115, Storage of VOCs	R115-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
STY-MS1132	40 CFR Part 60, Subpart Ka	60Ka-1	Product Stored = Stored product other than a petroleum liquid
STY-MS121	30 TAC Chapter 115, Storage of VOCs	R115B-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
STY-MS121	40 CFR Part 63, Subpart G	63G-1	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>
STY-MS2120	30 TAC Chapter 115, Storage of VOCs	R115B-3	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using a vapor recovery system (VRS)</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p> <p>Control Device Type = Flare</p>
STY-MS2120	40 CFR Part 63, Subpart G	63G-3	<p>MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).</p> <p>Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system, or is subject to § 63.148 of Subpart G</p> <p>NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.</p> <p>Hard Piping = The closed vent system is constructed of hard piping.</p> <p>Bypass Lines = Closed vent system has no by-pass lines.</p> <p>Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>Control Device Type = Flare</p> <p>Emission Control Type = Closed vent system (CVS) and control device (fixed roof)</p>
STY-MS225	30 TAC Chapter 115, Storage of VOCs	R115B-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
STY-MS225	40 CFR Part 60, Subpart K	60K-1	Construction/Modification Date = On or before June 11, 1973
STY-MS225	40 CFR Part 63, Subpart G	63G-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
STY-MS5100	30 TAC Chapter 115, Storage of VOCs	R115B-4	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
STY-MS5100	40 CFR Part 60, Subpart Kb	60KB-1	Product Stored = Waste mixture of indeterminate or variable composition Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia
STY-MS5100	40 CFR Part 61, Subpart FF	61FF-1	Bypass Line = The closed vent system does not contain any by-pass line that could divert the vent stream away from the control device. Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device. Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351. Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system. Closed Vent System and Control Device = A closed vent system and control device is used. Control Device Type/Operations = Flare Cover and Closed Vent = The cover and closed vent system are operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3). Closed Vent System and Control Device AMOC = Not using an alternate means of compliance Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.
STY-MS5100	40 CFR Part 63, Subpart G	63G-4	Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged. Wastewater Tank Properties = Volume of the wastewater tank is greater than 75m <sup>3</sup> but less than 151m <sup>3</sup> and vapor pressure of liquid stored is less than 13.1 kPa
STY-MS5200	30 TAC Chapter 115, Storage of VOCs	R115B-4	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia

Unit ID	Regulation	Index Number	Basis of Determination*
			Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
STY-MS5200	40 CFR Part 60, Subpart Kb	60KB-1	Product Stored = Waste mixture of indeterminate or variable composition Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
STY-MS5200	40 CFR Part 61, Subpart FF	61FF-1	Bypass Line = The closed vent system does not contain any by-pass line that could divert the vent stream away from the control device. Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device. Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351. Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system. Closed Vent System and Control Device = A closed vent system and control device is used. Control Device Type/Operations = Flare Cover and Closed Vent = The cover and closed vent system are operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3). Closed Vent System and Control Device AMOC = Not using an alternate means of compliance Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.
STY-MS5200	40 CFR Part 63, Subpart G	63G-4	Process Wastewater = The tank receives, manages, or treats process wastewater streams Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged. Wastewater Tank Properties = Volume of the wastewater tank is less than 75m <sup>3</sup> and storing liquid with any vapor pressure
POLYBLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R115C-1	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
POLYBLOAD	40 CFR Part 63, Subpart G	63G-1	Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111). Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.
STY-RCLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R115C-1	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
STY-RCLOAD	40 CFR Part 63, Subpart G	63G-1	Alternate Parameter Monitoring = Approval has not been sought or has not been granted by the EPA Administrator to monitor a parameter other than those specified in 40 CFR § 63.127(a) - (b). Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111).



Unit ID	Regulation	Index Number	Basis of Determination*
			Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.
STY-TLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R115C-1	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
STY-TLOAD	40 CFR Part 63, Subpart G	63G-1	Alternate Parameter Monitoring = Approval has not been sought or has not been granted by the EPA Administrator to monitor a parameter other than those specified in 40 CFR § 63.127(a) - (b). Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111). Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.
STY-TLOAD2	30 TAC Chapter 115, Loading and Unloading of VOC	R115C-1	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
STY-TLOAD2	40 CFR Part 63, Subpart G	63G-1	Alternate Parameter Monitoring = Approval has not been sought or has not been granted by the EPA Administrator to monitor a parameter other than those specified in 40 CFR § 63.127(a) - (b). Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111). Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.
STY-HF201	30 TAC Chapter 117, Subchapter B	R117B-1	Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent. Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). Unit Type = Process heater CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. CO Monitoring System = Continuous emission monitoring system complying with 30 TAC § 117.8100(a)(1). NOx Emission Limit Basis = Emission limit in lb/hr (or ppm by volume at 15% oxygen, dry basis) on a block one-hour average NOx Reduction = No NOx control method Fuel Type #1 = Natural gas Fuel Type #2 = Gaseous fuel other than natural gas, landfill gas or renewable non-fossil fuel gases Fuel Type #3 = Gaseous fuel containing more than 50% hydrogen by volume, on an annual basis, fuel gas sampled and analyzed every three hours. NOx Monitoring System = Continuous emissions monitoring system Annual Heat Input = Annual heat input is greater than 2.2(10 <sup>11</sup> ) Btu/yr, based on a rolling 12-month average. NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)
STY-HF201	40 CFR Part 63,	63DDDDD	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010.

Unit ID	Regulation	Index Number	Basis of Determination*
	Subpart DDDDD		ANNUAL CAPACITY FACTOR = NO ANNUAL CAPACITY FACTOR FUEL TYPE = NATURAL GAS HEAT INPUT CAPACITY = RATED HEAT INPUT CAPACITY OF 100 MMBTU/HR OR GREATER
STY-HS101	30 TAC Chapter 117, Subchapter B	R117B-1	Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent. Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). Unit Type = Process heater CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option Maximum Rated Capacity = Maximum rated capacity is at least 100 MMBtu/hr, but less than 200 MMBtu/hr. CO Monitoring System = Continuous emission monitoring system complying with 30 TAC § 117.8100(a)(1). NOx Emission Limit Basis = Emission limit in lb/hr (or ppm by volume at 15% oxygen, dry basis) on a block one-hour average NOx Reduction = No NO <sub>x</sub> control method Fuel Type #1 = Natural gas Fuel Type #2 = Gaseous fuel other than natural gas, landfill gas or renewable non-fossil fuel gases Fuel Type #3 = Gaseous fuel containing more than 50% hydrogen by volume, on an annual basis, fuel gas sampled and analyzed every three hours. NOx Monitoring System = Continuous emissions monitoring system Annual Heat Input = Annual heat input is less than or equal to 2.2(10 <sup>11</sup> ) Btu/yr, based on a rolling 12-month average. NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)
STY-HS101	40 CFR Part 63, Subpart DDDDD	63DDDD	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. ANNUAL CAPACITY FACTOR = NO ANNUAL CAPACITY FACTOR FUEL TYPE = NATURAL GAS HEAT INPUT CAPACITY = RATED HEAT INPUT CAPACITY OF 100 MMBTU/HR OR GREATER
STY-FUGIT	30 TAC Chapter 115, HRVOC Fugitive Emissions	R115H-1	Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines. Process Drains = The fugitive unit does not contain process drains. Title 30 TAC §115.780 Applicable = The fugitive unit contains a defined process and Highly Reactive VOC. Less Than 250 Components at Site = The fugitive unit is located at a site with less than 250 fugitive components in VOC service. Weight Percent HRVOC = Components in the fugitive unit contact process fluids that contain less than 5.0% HRVOC by weight and process fluids that contain HRVOC at 5.0%, or greater, by weight on an annual average basis. Bypass Line Valves = The fugitive unit contains bypass line valves. Pressure Relief Valves = The fugitive unit contains pressure relief valves.
STY-FUGIT	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R115D-1	COMPRESSOR SEALS/VOC SERVICE [REG V] = YES FLANGES = YES PRESSURE RELIEF VALVES IN GASEOUS VOC SERVICE [REG V] = YES PROCESS DRAINS/VOC SERVICE [REG V] = YES PUMP SEALS IN VOC SERVICE [REG V] = YES RUPTURE DISKS = RELIEF VALVES EQUIPPED WITH A RUPTURE DISK OR VENTING TO A CONTROL DEVICE ARE IN USE.

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether (MTBE) manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10.</p> <p>VALVES OTHER THAN PRESSURE RELIEF OR OPEN-ENDED/VOC SERVICE [REG V] = YES</p> <p>ACR = NO</p> <p>ACR FOR FLANGES = NO</p> <p>ALTERNATE CONTROL REQUIREMENT (ACR)-- VALVES [REG V] = NO</p> <p>ALTERNATE CONTROL REQUIREMENT (ACR)--COMPRESSOR SEALS [REG V] = NO</p> <p>ALTERNATE CONTROL REQUIREMENT (ACR)--PRESSURE RELIEF VALVES [REG V] = NO</p> <p>ALTERNATE CONTROL REQUIREMENT (ACR)--PROCESS DRAINS [REG V] = NO</p> <p>ALTERNATE CONTROL REQUIREMENT (ACR)--PUMP SEALS [REG V] = NO</p> <p>Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components.</p> <p>WEIGHT PERCENT VOC IN PROCESS FLUID [REG V] = PROCESS FLUID CONTAINS AT LEAST 10% VOC BY WEIGHT (PETROLEUM REFINERY, SYNTHETIC ORGANIC CHEMICAL, POLYMER RESIN OR MTBE MANUFACTURING PROCESSES)</p> <p>COMPLYING WITH §115.352(1) = YES</p> <p>COMPLYING W/ 30 TAC 115.352(1)--PROCESS DRAINS = YES</p> <p>RECIPROCATING COMPRESSORS OR POSITIVE DISPLACEMENT PUMPS [REG V] = NO RECIPROCATING COMPRESSORS OR POSITIVE DISPLACEMENT PUMPS USED IN NATURAL GAS/GASOLINE PROCESSING OPERATIONS</p> <p>TVP LESS THAN OR EQUAL TO 0.044 PSIA AT 68 DEGREES F--PROCESS DRAINS [REG V] = PROCESS FLUID HAS A TRUE VAPOR PRESSURE (TVP) LESS THAN OR EQUAL TO 0.044 PSIA AT 68 DEGREES FAHRENHEIT</p> <p>TVP OF PROCESS FLUID LESS THAN OR EQUAL TO 0.044 PSIA = YES</p> <p>TVP OF PROCESS FLUID VOC &lt;= 0.044 PSI @ 68° = NO</p> <p>TVP OR PROCESS FLUID LESS THAN OR EQUAL TO 0.044 PSIA = YES</p> <p>REMAINING SEALS COMPLY WITH 115.352(1)--PUMP SEALS [REG V] = YES</p> <p>TVP GREATER THAN 0.044 PSIA AT 68 DEGREES F--PROCESS DRAINS [REG V] = PROCESS FLUID HAS A TRUE VAPOR PRESSURE (TVP) GREATER THAN 0.044 PSIA AT 68 DEGREES FAHRENHEIT</p> <p>TVP OF PROCESS FLUID &gt; 0.044 PSIA = YES</p> <p>TVP OF PROCESS FLUID LESS THAN OR EQUAL TO 0.044 PSIA = NO</p> <p>Complying With § 115.352(1) = YES</p>
STY-FUGIT	40 CFR Part 63, Subpart H	63H-HON-1	<p>ANY (CLOSED VENT SYSTEMS) = COMPONENT PRESENT</p> <p>ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT</p> <p>BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE</p> <p>ENCLOSED-VENTED PROCESS UNIT AMEL = UNIT CONTAINS A TOTALLY ENCLOSED VENTED PROCESS UNIT COMPLYING WITH AN ALTERNATE MEANS OF EMISSION LIMITATION IN § 63.179</p> <p>EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE</p> <p>GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT</p> <p>LIGHT LIQUID SERVICE (PUMPS) = COMPONENT PRESENT</p> <p>HEAVY LIQUID SERVICE = ENCLOSED VENTED PROCESS UNIT CONTAINS EQUIPEMENT IN HEAVY LIQUID SERVICE</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT</p> <p>HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT</p> <p>HEAVY LIQUID SERVICE (PUMPS) = COMPONENT PRESENT</p> <p>NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES</p> <p>RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT</p> <p>UNSAFE TO INSPECT = FUGITIVE UNIT CONTAINS ANY CLOSED-VENT SYSTEM WITH PARTS DESIGNATED AS UNSAFE TO INSPECT</p> <p>ANY (INSTRUMENTATION SYSTEMS) = COMPONENT NOT PRESENT</p> <p>BATCH PROCESS AMEL = UNIT DOES NOT CONTAIN A BATCH PROCESS UNIT COMPLYING WITH AN ALTERNATE MEANS OF EMISSION LIMITATION IN § 63.178</p> <p>DIFFICULT TO INSPECT = FUGITIVE UNIT CONTAINS ANY CLOSED-VENT SYSTEM WITH PARTS DESIGNATED AS DIFFICULT TO INSPECT</p> <p>GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT PRESENT</p> <p>QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS</p> <p>VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE</p> <p>ANY (COMPRESSORS) = COMPONENT PRESENT</p> <p>EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS</p> <p>ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT</p> <p>HEAVY LIQUID SERVICE (INSTRUMENTATION SYSTEMS) = COMPONENT NOT PRESENT</p> <p>HEAVY LIQUID SERVICE (VALVES) = COMPONENT PRESENT</p> <p>LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT CONTAINS ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR</p> <p>ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT NOT PRESENT</p> <p>GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT</p> <p>HEAVY LIQUID SERVICE = ANY OF THE EQUIPMENT IN ORGANIC HAP SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR IS IN HEAVY LIQUID SERVICE</p> <p>QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES</p> <p>AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL)</p> <p>FLARES (CLOSED VENT SYSTEMS) = COMPONENT PRESENT</p> <p>GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT</p> <p>HEAVY LIQUID SERVICE (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT NOT PRESENT</p> <p>LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT</p> <p>HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT</p> <p>HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT</p> <p>ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT NOT PRESENT</p> <p>HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT NOT PRESENT</p>
STY-CTWR	40 CFR Part 63,	63Q-1	USED CHROMIUM COMPOUNDS AFTER SEPT. 8 1994 (MACT Q) = The industrial process cooling tower has not used compounds

Unit ID	Regulation	Index Number	Basis of Determination*
	Subpart Q		containing chromium on or after September 8, 1994.
STY-APISEP	30 TAC Chapter 115, Water Separation	R115B3-1	ALTERNATE CONTROL REQUIREMENT (ACR) [REG V] = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910. EXEMPTION FROM CONTROL REQUIREMENTS OF 115.132 [REG V] = Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure less than 0.5 psia (3.4 kPa) obtained from any equipment.
STY-APISEP	40 CFR Part 63, Subpart VV	63VV-1	CONTROL [MACT VV] = No subpart of 40 CFR Parts 60, 61, or 63 references the use of 40 CFR Part 63, Subpart VV for control of emissions from the separator.
STY-MS5100	40 CFR Part 61, Subpart FF	61FF-1	ALTERNATE MEANS OF COMPLIANCE = NO BY-PASS LINE = THE CLOSED VENT SYSTEM HAS NO BY-PASS LINE BY-PASS LINE VALVE = A FLOW INDICATOR IS INSTALLED AT THE ENTRANCE TO THE BY-PASS LINE. ALTERNATE STANDARDS FOR OIL-WATER SEPARATORS = NO CONTROL DEVICE TYPE/OPERATION = FLARE FLOATING ROOF = NO FLOATING ROOF FUEL GAS SYSTEM = EMISSIONS ARE ROUTED TO A CONTROL DEVICE COVER AND CLOSED VENT = CLOSED VENT SYSTEM IS OPERATED SUCH THAT THE OIL-WATER SEPARATOR IS MAINTAINED AT NON-NEGATIVE PRESSURE (GREATER THAN ATMOSPHERIC) CLOSED VENT SYSTEM AND CONTROL DEVICE AMOC = COMPLYING WITH THE REQUIREMENTS OF § 61.349
STY-MS5100	40 CFR Part 63, Subpart G	63G-1	ALT MONITORING PARAMETERS = COMPLYING WITH THE MONITORING REQUIREMENTS OF SUBPART G NEGATIVE PRESSURE = FIXED ROOF AND CLOSED-VENT SYSTEM ARE NOT OPERATED AND MAINTAINED UNDER NEGATIVE PRESSURE PROCESS WASTEWATER = OIL-WATER SEPARATOR RECEIVES, MANAGES, OR TREATS PROCESS WASTEWATER STREAMS AS DEFINED IN TITLE 40 CFR PART 63, SUBPART F CLOSED VENT SYSTEM = CLOSED VENT SYSTEM IS SUBJECT TO AND COMPLYING WITH § 63.148 NEW SOURCE = FACILITY IS A EXISTING SOURCE AS DEFINED IN MACT G BYPASS LINES = BYPASS LINE VALVES ARE SECURED IN THE CLOSED POSITION WITH A CAR-SEAL OR LOCK-AND-KEY CONFIGURATION COMBINATION OF CONTROL DEVICES = VENT STREAM IS NOT TREATED USING A COMBINATION OF CONTROL DEVICES OIL-WATER SEPARATOR TYPE = FIXED ROOF AND A CLOSED-VENT SYSTEM THAT ROUTES THE ORGANIC HAZARDOUS AIR POLLUTANT VAPORS VENTED FROM THE OIL-WATER SEPARATOR TO A CONTROL DEVICE CONTROL DEVICE TYPE = FLARE FLOATING ROOF ALTERNATE MONITORING PARAMETERS = FLOATING ROOF ALTERNATE MONITORING PARAMETERS ARE NOT APPROVED OR ARE NOT REQUESTED MONITORING OPTIONS = CONTROL DEVICE IS USING THE MONITORING PARAMETERS SPECIFIED IN TABLE 13
STY-MS5200	40 CFR Part 61, Subpart FF	61FF-1	ALTERNATE MEANS OF COMPLIANCE = NO BY-PASS LINE = THE CLOSED VENT SYSTEM HAS NO BY-PASS LINE BY-PASS LINE VALVE = A FLOW INDICATOR IS INSTALLED AT THE ENTRANCE TO THE BY-PASS LINE. ALTERNATE STANDARDS FOR OIL-WATER SEPARATORS = NO CONTROL DEVICE TYPE/OPERATION = FLARE

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>FLOATING ROOF = NO FLOATING ROOF</p> <p>FUEL GAS SYSTEM = EMISSIONS ARE ROUTED TO A CONTROL DEVICE</p> <p>COVER AND CLOSED VENT = CLOSED VENT SYSTEM IS OPERATED SUCH THAT THE OIL-WATER SEPARATOR IS MAINTAINED AT NON-NEGATIVE PRESSURE (GREATER THAN ATMOSPHERIC)</p> <p>CLOSED VENT SYSTEM AND CONTROL DEVICE AMOC = COMPLYING WITH THE REQUIREMENTS OF § 61.349</p>
STY-MS5200	40 CFR Part 63, Subpart G	63G-1	<p>ALT MONITORING PARAMETERS = COMPLYING WITH THE MONITORING REQUIREMENTS OF SUBPART G</p> <p>NEGATIVE PRESSURE = FIXED ROOF AND CLOSED-VENT SYSTEM ARE NOT OPERATED AND MAINTAINED UNDER NEGATIVE PRESSURE</p> <p>PROCESS WASTEWATER = OIL-WATER SEPARATOR RECEIVES, MANAGES, OR TREATS PROCESS WASTEWATER STREAMS AS DEFINED IN TITLE 40 CFR PART 63, SUBPART F</p> <p>CLOSED VENT SYSTEM = CLOSED VENT SYSTEM IS SUBJECT TO AND COMPLYING WITH § 63.148</p> <p>NEW SOURCE = FACILITY IS A EXISTING SOURCE AS DEFINED IN MACT G</p> <p>BYPASS LINES = BYPASS LINE VALVES ARE SECURED IN THE CLOSED POSITION WITH A CAR-SEAL OR LOCK-AND-KEY CONFIGURATION</p> <p>COMBINATION OF CONTROL DEVICES = VENT STREAM IS NOT TREATED USING A COMBINATION OF CONTROL DEVICES</p> <p>OIL-WATER SEPARATOR TYPE = FIXED ROOF AND A CLOSED-VENT SYSTEM THAT ROUTES THE ORGANIC HAZARDOUS AIR POLLUTANT VAPORS VENTED FROM THE OIL-WATER SEPARATOR TO A CONTROL DEVICE</p> <p>CONTROL DEVICE TYPE = FLARE</p> <p>FLOATING ROOF ALTERNATE MONITORING PARAMETERS = FLOATING ROOF ALTERNATE MONITORING PARAMETERS ARE NOT APPROVED OR ARE NOT REQUESTED</p> <p>MONITORING OPTIONS = CONTROL DEVICE IS USING THE MONITORING PARAMETERS SPECIFIED IN TABLE 13</p>
AS-207	40 CFR Part 63, Subpart G	63G-2	<p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Boiler or process heater with a design heat input capacity of greater than 44 MW.</p> <p>Overlap = Title 40 CFR Part 60, Subpart NNN</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.</p> <p>Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.</p>
AS-207	40 CFR Part 63, Subpart G	63G-3	<p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Flare</p> <p>Overlap = Title 40 CFR Part 60, Subpart NNN</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
GRP-STYVAVENT	30 TAC Chapter 115, Vent Gas Controls	R115B-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Smokeless flare</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p> <p>VOC Concentration = VOC concentration is less than 612 ppmv.</p>
GRP-STYVAVENT	40 CFR Part 63, Subpart G	63G-1	<p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Flare</p> <p>Overlap = Title 40 CFR Part 60, Subpart NNN</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device.</p> <p>Flow Indicator = By-pass line valve is secured with a car-seal or lock-and-key type configuration.</p> <p>Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.</p>
AS-106	40 CFR Part 60, Subpart NNN	60NNN-1	<p>40 CFR 60 (NSPS) SUBPART NNN CHEMICALS = DISTILLATION UNIT PRODUCES ANY CHEMICAL LISTED IN 40 CFR § 60.667 AS A PRODUCT, CO-PRODUCT, BY-PRODUCT, OR INTERMEDIATE</p> <p>CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE [NSPS NNN] = ON/BEFORE DECEMBER 30, 1983</p>
AS-207	40 CFR Part 60, Subpart NNN	60NNN-2	<p>40 CFR 60 (NSPS) SUBPART NNN CHEMICALS = DISTILLATION UNIT PRODUCES ANY CHEMICAL LISTED IN 40 CFR § 60.667 AS A PRODUCT, CO-PRODUCT, BY-PRODUCT, OR INTERMEDIATE</p> <p>TOTAL RESOURCE EFFECTIVENESS (TRE) [NSPS NNN] = &lt; OR EQUAL TO 8.0 NOT FROM HALOGENATED VENT STREAM</p> <p>CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE [NSPS NNN] = AFTER DECEMBER 30, 1983</p> <p>TOTAL ORGANIC COMPOUNDS (TOC) REDUCTION = COMPLIANCE IS ACHIEVED THROUGH THE USE OF A NON-FLARE COMBUSTION DEVICE.</p> <p>40 CFR 60 (NSPS) SUBPART NNN CONTROL DEVICE = BOILER/PROCESS HEATER &gt; OR EQUAL TO 44 MW</p> <p>VENT TYPE [NSPS NNN] = DISCHARGING TO A VRS</p> <p>DISTILLATION UNIT TYPE (NSPS NNN) = DOES NOT QUALIFY FOR ANY EXEMPTION IN § 60.660(C)(1)-(3)</p> <p>TOTAL DESIGN CAPACITY [NSPS NNN] = &gt; OR EQUAL TO 1 GGRAM/YR</p> <p>VENT STREAM FLOW RATE [NSPS NNN] = &gt; OR EQUAL TO 0.008 SCM/MIN</p>
AS-207	40 CFR Part 60, Subpart NNN	60NNN-3	<p>40 CFR 60 (NSPS) SUBPART NNN CHEMICALS = DISTILLATION UNIT PRODUCES ANY CHEMICAL LISTED IN 40 CFR § 60.667 AS A PRODUCT, CO-PRODUCT, BY-PRODUCT, OR INTERMEDIATE</p> <p>TOTAL RESOURCE EFFECTIVENESS (TRE) [NSPS NNN] = &lt; OR EQUAL TO 8.0 NOT FROM HALOGENATED VENT STREAM</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE [NSPS NNN] = AFTER DECEMBER 30, 1983</p> <p>TOTAL ORGANIC COMPOUNDS (TOC) REDUCTION = COMPLIANCE IS ACHIEVED THROUGH THE USE OF A NON-FLARE COMBUSTION DEVICE.</p> <p>40 CFR 60 (NSPS) SUBPART NNN CONTROL DEVICE = FLARE</p> <p>VENT TYPE [NSPS NNN] = DISCHARGING TO A VRS</p> <p>DISTILLATION UNIT TYPE (NSPS NNN) = DOES NOT QUALIFY FOR ANY EXEMPTION IN § 60.660(C)(1)-(3)</p> <p>TOTAL DESIGN CAPACITY [NSPS NNN] = &gt; OR EQUAL TO 1 GGRAM/YR</p> <p>VENT STREAM FLOW RATE [NSPS NNN] = &gt; OR EQUAL TO 0.008 SCM/MIN</p>
GRP-DISTILL1	40 CFR Part 60, Subpart NNN	60NNN-2	<p>40 CFR 60 (NSPS) SUBPART NNN CHEMICALS = DISTILLATION UNIT PRODUCES ANY CHEMICAL LISTED IN 40 CFR § 60.667 AS A PRODUCT, CO-PRODUCT, BY-PRODUCT, OR INTERMEDIATE</p> <p>CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE [NSPS NNN] = ON/BEFORE DECEMBER 30, 1983</p>
GRP-DISTOPS	40 CFR Part 60, Subpart NNN	60NNN-1	<p>40 CFR 60 (NSPS) SUBPART NNN CHEMICALS = DISTILLATION UNIT PRODUCES ANY CHEMICAL LISTED IN 40 CFR § 60.667 AS A PRODUCT, CO-PRODUCT, BY-PRODUCT, OR INTERMEDIATE</p> <p>TOTAL RESOURCE EFFECTIVENESS (TRE) [NSPS NNN] = &lt; OR EQUAL TO 8.0 NOT FROM HALOGENATED VENT STREAM</p> <p>CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE [NSPS NNN] = AFTER DECEMBER 30, 1983</p> <p>TOTAL ORGANIC COMPOUNDS (TOC) REDUCTION = COMPLIANCE IS ACHIEVED THROUGH THE USE OF A NON-FLARE COMBUSTION DEVICE.</p> <p>40 CFR 60 (NSPS) SUBPART NNN CONTROL DEVICE = FLARE</p> <p>VENT TYPE [NSPS NNN] = NOT DISCHARGING A VENT STREAM TO A VRS</p> <p>DISTILLATION UNIT TYPE (NSPS NNN) = DOES NOT QUALIFY FOR ANY EXEMPTION IN § 60.660(C)(1)-(3)</p> <p>TOTAL DESIGN CAPACITY [NSPS NNN] = &gt; OR EQUAL TO 1 GGRAM/YR</p> <p>VENT STREAM FLOW RATE [NSPS NNN] = &gt; OR EQUAL TO 0.008 SCM/MIN</p>
STYHOTWELL	40 CFR Part 60, Subpart NNN	60NNN-1	<p>40 CFR 60 (NSPS) SUBPART NNN CHEMICALS = DISTILLATION UNIT PRODUCES ANY CHEMICAL LISTED IN 40 CFR § 60.667 AS A PRODUCT, CO-PRODUCT, BY-PRODUCT, OR INTERMEDIATE</p> <p>CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE [NSPS NNN] = ON/BEFORE DECEMBER 30, 1983</p>
STY-REACT	40 CFR Part 60, Subpart RRR	60RRR-1	<p>CHEMICALS LISTED IN §60.707 = AFFECTED FACILITY IS PART OF A PROCESS UNIT THAT PRODUCES ANY CHEMICALS LISTED IN 40 CFR § 60.707 AS A PRODUCT, CO-PRODUCT, BY PRODUCT, OR INTERMEDIATE</p> <p>CONSTRUCTION/MODIFICATION DATE = ON/BEFORE JUNE 29, 1990</p>
PRO-STY	40 CFR Part 63, Subpart F	63F-1	<p>Applicable Chemicals = THE CHEMICAL MANUFACTURING PROCESS UNIT MANUFACTURES, AS A PRIMARY PRODUCT, ONE OR MORE OF THE CHEMICALS LISTED IN 40 CFR § 63.100(B)(1)(I) OR 40 CFR § 63.100(B)(1)(II)</p> <p>Table 2 HAP = THE CHEMICAL MANUFACTURING PROCESS UNIT USES AS A REACTANT OR MANUFACTURES, AS A PRODUCT OR CO-PRODUCT, ONE OR MORE OF THE ORGANIC HAZARDOUS AIR POLLUTANTS (HAPS) IN TABLE 2</p> <p>Alternate Means of Emission Limitation = AN ALTERNATIVE MEANS OF EMISSION LIMITATION IS NOT USED TO ACHIEVE A REDUCTION IN ORGANIC HAP EMISSION</p> <p>Heat Exchange System = A HEAT EXCHANGE SYSTEM IS USED</p> <p>Cooling Water Pressure = THE HEAT EXCHANGE SYSTEM IS OPERATED WITH THE MINIMUM PRESSURE ON THE COOLING WATER SIDE AT LEAST 35 KILOPASCALS GREATER THAN THE MAXIMUM PRESSURE ON THE PROCESS SIDE</p>

\* - The "unit attributes" or operating conditions that determine what requirements apply



## NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

## New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

[www.tceq.texas.gov/permitting/air/permitbyrule/historical\\_rules/old106list/index106.html](http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html)

Outdated Standard Exemption lists may be viewed at the following Web site:

[www.tceq.texas.gov/permitting/air/permitbyrule/historical\\_rules/oldselist/se\\_index.html](http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html)

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX459M3	Issuance Date: 07/24/2013
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 107670	Issuance Date: 02/27/2013
Authorization No.: 8978	Issuance Date: 07/24/2013
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.512	Version No./Date: 06/13/2001
Number: 51	Version No./Date: 07/20/1992
Number: 61	Version No./Date: 09/12/1989
Number: 61	Version No./Date: 07/20/1992

## **Emission Units and Emission Points**

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sandblasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the “Maximum Allowable Emission Rate Table”, or “MAERT” for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

## **Monitoring Sufficiency**

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit’s compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

## **Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected**

### **Periodic Monitoring:**

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

<b>Unit/Group/Process Information</b>	
ID No.: GRP-STYVAVENT	
Control Device ID No.: N.A.	Control Device Type: N.A.
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R115B-1
Pollutant: VOC	Main Standard: § 115.121(a)(2)
<b>Monitoring Information</b>	
Indicator: VOC concentration	
Minimum Frequency: Once per year	
Averaging Period: N.A.	
Deviation Limit: Failure to measure and record fugitive emissions from the vapor collection system in accordance with 40 CFR Part 60, Appendix A, Method 21.	
<p>Basis of monitoring:</p> <p>It is widely practiced and accepted to monitor the VOC concentration at the outlet of a control device by use of a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Outlet VOC concentration has been used as an indicator of VOC emissions in many federal rules including 40 CFR Part 60, Subpart III, 40 CFR Part 60, Subpart NNN, 40 CFR Part 60, Subpart RRR, 40 CFR Part 61, Subpart BB, 40 CFR Part 61, Subpart FF, 40 CFR Part 63, Subpart R, 40 CFR Part 63, Subpart DD, and 40 CFR Part 63, Subpart HH.</p>	

Unit/Group/Process Information	
ID No.: GRP-STYVAVENT	
Control Device ID No.: N.A.	Control Device Type: N.A.
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R115B-1
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Visual inspection	
Minimum Frequency: Once per year	
Averaging Period: N.A.	
Deviation Limit: Failure to visually inspect all components of the vapor collection system for defects, such as cracks, holes, gaps, loose connections, or broken or missing covers or other closure devices, that could result in air emissions.	
<p>Basis of monitoring:</p> <p>It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and recorded in a log. This option assures that the owner or operator is adequately maintaining the control equipment.</p>	

Unit/Group/Process Information	
ID No.: STY-MS2120	
Control Device ID No.: FL-201	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R115B-3
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Pilot Flame.	
Minimum Frequency: Once per hour.	
Averaging Period: N/A	
Deviation Limit: It shall be considered a deviation if there is no pilot flame while the unit is operating.	
<p>Basis of monitoring:</p> <p>It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.</p>	

## Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes  
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes  
OP-UA3 - Storage Tank/Vessel Attributes  
OP-UA4 - Loading/Unloading Operations Attributes  
OP-UA5 - Process Heater/Furnace Attributes  
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes  
OP-UA7 - Flare Attributes  
OP-UA8 - Coal Preparation Plant Attributes  
OP-UA9 - Nonmetallic Mineral Process Plant Attributes  
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes  
OP-UA11 - Stationary Turbine Attributes  
OP-UA12 - Fugitive Emission Unit Attributes  
OP-UA13 - Industrial Process Cooling Tower Attributes  
OP-UA14 - Water Separator Attributes  
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes  
OP-UA16 - Solvent Degreasing Machine Attributes  
OP-UA17 - Distillation Unit Attributes  
OP-UA18 - Surface Coating Operations Attributes  
OP-UA19 - Wastewater Unit Attributes  
OP-UA20 - Asphalt Operations Attributes  
OP-UA21 - Grain Elevator Attributes  
OP-UA22 - Printing Attributes  
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes  
OP-UA25 - Synthetic Fiber Production Attributes  
OP-UA26 - Electroplating and Anodizing Unit Attributes  
OP-UA27 - Nitric Acid Manufacturing Attributes  
OP-UA28 - Polymer Manufacturing Attributes  
OP-UA29 - Glass Manufacturing Unit Attributes  
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes  
OP-UA31 - Lead Smelting Attributes  
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes  
OP-UA33 - Metallic Mineral Processing Plant Attributes  
OP-UA34 - Pharmaceutical Manufacturing  
OP-UA35 - Incinerator Attributes  
OP-UA36 - Steel Plant Unit Attributes  
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes  
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes  
OP-UA39 - Sterilization Source Attributes  
OP-UA40 - Ferroalloy Production Facility Attributes  
OP-UA41 - Dry Cleaning Facility Attributes  
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes  
OP-UA43 - Sulfuric Acid Production Attributes  
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes  
OP-UA45 - Surface Impoundment Attributes  
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes  
OP-UA47 - Ship Building and Ship Repair Unit Attributes  
OP-UA48 - Air Oxidation Unit Process Attributes  
OP-UA49 - Vacuum-Producing System Attributes

OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes  
OP-UA51 - Dryer/Kiln/Oven Attributes  
OP-UA52 - Closed Vent Systems and Control Devices  
OP-UA53 - Beryllium Processing Attributes  
OP-UA54 - Mercury Chlor-Alkali Cell Attributes  
OP-UA55 - Transfer System Attributes  
OP-UA56 - Vinyl Chloride Process Attributes  
OP-UA57 - Cleaning/Depainting Operation Attributes  
OP-UA58 - Treatment Process Attributes  
OP-UA59 - Coke By-Product Recovery Plant Attributes  
OP-UA60 - Chemical Manufacturing Process Unit Attributes  
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes  
OP-UA62 - Glycol Dehydration Unit Attributes  
OP-UA63 - Vegetable Oil Production Attributes